Slide 1

FIXED LADDER ASSESSMENT

OSHA Compliance

Slide 2

OSHA REGULATIONS FOR FIXED LADDERS

- The Occupational Safety and Health Administration (OSHA) has established specific standards to ensure the safety of workers using fixed ladders. These regulations, found primarily in 29 CFR1910.23, 29 CFR 1910.28, and 29 CFR 1910.29 outline the requirements for the design, construction, installation, and maintenance of fixed ladders, as well as the necessary fall protection measures.

Slide 3

1. SCOPE AND APPLICATION

- OSHA's fixed ladder regulations apply to all general industry workplaces. They cover fixed ladders that are permanently attached to a structure, building, or equipment. The rules are designed to prevent falls and ensure that ladders are safe to use.

Slide 4

2. HEIGHT THRESHOLD FOR FALL PROTECTION

- OSHA mandates fall protection for fixed ladders that extend more than 24 feet above a lower level. This requirement is intended to protect workers from falls that can result in serious injury or death.

Slide 5

LADDERS INSTALLED BEFORE NOVEMBER 19, 2018:

- Employers have the option to use cages or wells as fall protection until the ladder needs to be replaced or modified.

Slide 6

LADDERS INSTALLED AFTER NOVEMBER 19, 2018:

- Must be equipped with a ladder safety system or a personal fall arrest system (PFAS).

Slide 7

3. DESIGN AND CONSTRUCTION REQUIREMENTS

- Fixed ladders must be designed and constructed to meet specific OSHA standards. These requirements ensure the structural integrity and safety of the ladders.

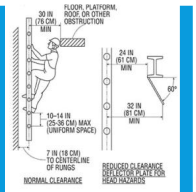


Figure D-5 -- Fixed Ladder Clearances

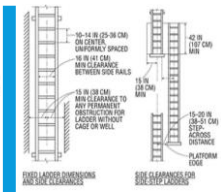


Figure D-2 -- Side-Step Fixed Ladder Sections

Slide 8

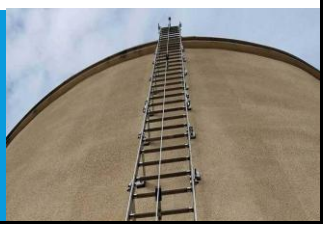
RUNGS AND CLEATS:

- Must be shaped to minimize slipping.
- Should be uniformly spaced between 10 and 14 inches apart
- The minimum clear width must be 16 inches to provide ample space for safe climbing.

Slide 9

SIDE RAILS:

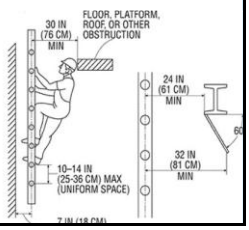
- Must be capable of supporting the intended load.
- Should provide a secure handhold for climbers.



Slide 10

CLEARANCE:

- Adequate clearance must be maintained around the ladder to prevent hazards.
- Minimum clearance of 7 inches from the centerline of the rungs to the nearest obstruction.



Slide 11

4. INSTALLATION REQUIREMENTS

- Proper installation of fixed ladders is crucial for safety. OSHA specifies several installation requirements to ensure ladders are securely attached and safe to use.

Slide 12

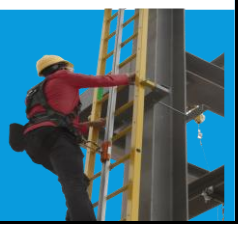
ANGLE OF INCLINATION:

- Fixed ladders should be installed at an angle between 75 and 90 degrees from the horizontal.

Slide 13

MOUNTING:

- Ladders must be securely fastened to withstand all expected loads.



Slide 14

ACCESS AND EGRESS:

- Ladders must provide safe access to work areas and emergency exits.

Slide 15

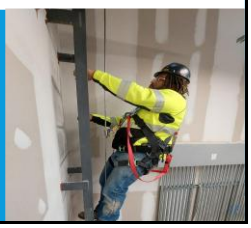
5. FALL PROTECTION SYSTEMS

- OSHA requires the use of fall protection systems for fixed ladders over 24 feet. These systems are designed to prevent falls or arrest a fall if it occurs.

Slide 16

LADDER SAFETY SYSTEMS:

- Include carriers (rails or cables), safety sleeves, body harnesses, and connectors.
- Allow workers to climb without continuously holding onto the ladder.
- Automatically lock in place to arrest a fall.



Slide 17

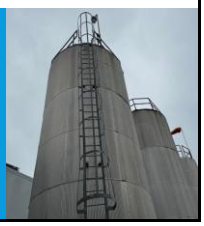
PERSONAL FALL ARREST SYSTEMS (PFAS):

- Consist of full-body harnesses, anchorage points, and connecting devices (such as lanyards or lifelines).
- Designed to stop a fall before the worker reaches a lower level.

Slide 18

CAGES AND WELLS:

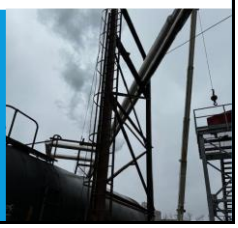
- Cages (enclosures around the ladder) and wells (barrier walls) were traditionally used for fall protection.
- No longer accepted for new ladders installed after November 19, 2018, but can still be used for ladders installed before this date.



Slide 19

6. INSPECTION AND MAINTENANCE

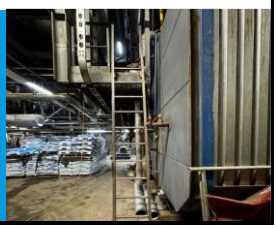
- Regular inspection and maintenance of fixed ladders and fall protection systems are essential to ensure continued safety and compliance with OSHA regulations.



Slide 20

INSPECTION FREQUENCY:

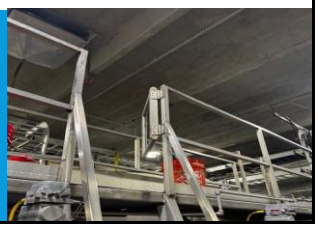
- Ladders and fall protection systems must be inspected regularly for damage, wear, and other hazards.
- Inspections should be conducted by a competent person who is trained to identify potential issues.



Slide 21

MAINTENANCE AND REPAIRS:

- Any defects or damages identified during inspections must be repaired or replaced immediately.
- Maintenance should be performed according to the manufacturer's instructions and OSHA standards.



Slide 22

RECORD KEEPING:

- Employers must keep detailed records of inspections, maintenance, and repairs to demonstrate compliance with OSHA regulations.

Slide 23

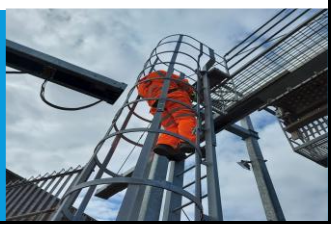
7. EMPLOYEE TRAINING

- Training is a critical component of OSHA's fixed ladder regulations. Workers must be trained to use ladders and fall protection systems safely and effectively.

Slide 24

TRAINING REQUIREMENTS:

- Employees must receive training on the proper use, inspection, and maintenance of fixed ladders and fall protection systems.
- Training should include instruction on recognizing hazards, using fall protection equipment, and responding to emergencies.



Slide 25

REFRESHER TRAINING:

- Regular refresher training should be provided to ensure that employees maintain their knowledge and skills.
- Additional training is required whenever new equipment is introduced or when an employee demonstrates a lack of understanding.

Slide 26

8. ADDITIONAL REQUIREMENTS AND GUIDELINES

- OSHA also provides additional guidelines and recommendations to enhance the safety of fixed ladders and fall protection systems.

Slide 27

SAFE CLIMBING PRACTICES:

- Workers should always maintain three points of contact while climbing (e.g., two hands and one foot or two feet and one hand).
- Tools and equipment should be carried in a tool belt or hoisted separately to keep hands free for climbing.

Slide 28

EMERGENCY PROCEDURES:

- Employers must develop and implement emergency response plans for fall incidents.
- Rescue equipment must be readily available and in good condition.

Slide 29

COMPLIANCE ASSISTANCE:

- OSHA offers compliance assistance resources, including consultation services, training programs, and publications, to help employers understand and meet regulatory requirements.

Slide 30

CONCLUSION

- OSHA's regulations for fixed ladders are designed to protect workers from fall hazards and ensure the safety of ladder use in the workplace. By adhering to these standards, employers can create a safer work environment, reduce the risk of injuries and fatalities, and avoid legal and financial consequences. Proper design, installation, and maintenance of fixed ladders, along with the implementation of effective fall protection systems and comprehensive employee training, are essential components of OSHA compliance and workplace safety.